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(54) Title: THREE-DIMENSIONAL VIDEO SCANNER

(57) **Abstract:** Apparatus for analyzing light having at least one wavelength, the apparatus having a light deflector (12) for deflecting the light to provide a deflected light beam characterized by at least one wavelength dependent angle corresponding to the at least one wavelength of light, and encoder (20) capable of encoding the deflected light beam so as to provide an encoded light beam characterized by at least one angle dependent polarization state corresponding to the at least one wavelength-dependent angle; and a decoder (24) for decoding the encoded light beam to determine at least one spectral component of the light.